



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/727,342	11/26/2003	Jari Syrjarinne	944-001.122	5263

4955 7590 07/29/2005

WARE FRESSOLA VAN DER SLUYS &  
ADOLPHSON, LLP  
BRADFORD GREEN BUILDING 5  
755 MAIN STREET, P O BOX 224  
MONROE, CT 06468

EXAMINER

GANTT, ALAN T

ART UNIT PAPER NUMBER

2684

DATE MAILED: 07/29/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

10/727,342

Applicant(s)

SYRJARINNE ET AL.

Examiner

Alan T. Gantt

Art Unit

2684

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 26 November 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-13 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-13 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

## DETAILED ACTION

### *Claim Rejections - 35 USC § 103*

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Healy et al., in view of Copley et al.

Regarding claim 1, Healy discloses a laser based tactical engagement simulation training system characterized by a communication code structure for the system. An apparatus, comprising a ranging receiver (paragraph 0074 – the GPS receiver), for providing output signals indicating information as to the position or motion of the ranging receiver (paragraph 0074), the apparatus characterized in that: the ranging receiver is responsive to power control signals based on sensor signals indicating whether the ranging receiver (paragraph 0073) is in motion, the power control signals for powering on or off selected components of the ranging receiver (paragraph 0085); and in that the apparatus further comprises: a motion sensor (paragraph 0085). Healy does not show a mechanical coupling to the ranging receiver.

Copley discloses a system for monitoring the location of individuals and includes a wearable device and a portable device operatively coupled to the wearable device. (Abstract)  
Copley meets the limitation:

mechanically coupled to the ranging receiver, for providing the sensor signals. (Figure 2, refs. 116, 216, and 223)

Healy and Copley are combinable because they share a common endeavor, namely devices that monitor location and motion. At the time of the applicant's invention it would have been obvious to modify Healy to include a mechanical coupling of the motion sensor to the range receiver as done by Copley in order to provide greater assurance of connectivity.

Regarding claim 2, Copley meets the limitation -An apparatus as in claim 1, further characterized by a controller (paragraph 0079), responsive to the sensor signals, for providing the power control signals so as to power down the selected components of the ranging receiver if the sensor signals indicate that the ranging receiver is substantially stationary. (paragraph 0079)

Regarding claim 3, Healy meets the limitation -An apparatus as in claim 1, wherein the controller also uses the output signals from the ranging receiver to determine whether to power down the selected components of the ranging receiver (paragraph 0074).

Regarding claim 4, Healy meets the limitation -An apparatus as in claim 1, wherein the controller re-applies power to the selected components as soon as the motion sensor indicates significant motion of the ranging receiver (paragraph 0074).

Art Unit: 2684

Regarding claim 5, Healy meets the limitation -An apparatus as in claim 1, wherein the controller re-applies power to the selected components according to a predetermined rule allowing for the power to remain off for a predetermined time based optionally on recent past sensor signals, but at least as soon as the motion sensor (14) indicates significant motion of the ranging receiver (12). (paragraph 0074 – a predetermined number of steps).

Regarding claim 6, the examiner takes Official Notice that it is well known utilize a motion sensor that is a MEMS-based motion sensor and that it would have been obvious to modify the Healy / Copley to include MEMS-based motion sensors due to performance, market acceptance and demand.

Regarding claim 7, Copley meets the limitation - An apparatus as in claim 1, wherein the motion sensor comprises an electronic compass or an accelerometer. (paragraph 0066)

Regarding claim 8, Healy meets the limitation - A system, comprising: an apparatus as in claim 1, and further comprising one or more ranging satellites for providing ranging signals conveying navigation information (paragraph 0074), wherein the apparatus provides the output signals indicating information as to the position or motion of the ranging receiver based on the ranging signals (paragraph 0074).

Regarding claim 9, Copley meets the limitation - A system, comprising: a cellular communication terminal including an apparatus as in claim 1, and a cellular communication

Art Unit: 2684

network by which the cellular communication terminal is communicative with other communication terminals (paragraph 0084).

Regarding claim 10, Copley meets the limitation - A system, comprising: a cellular communication terminal including an apparatus as in claim 1; a cellular communication network by which the cellular communication terminal is communicative with other communication terminals (paragraph 0084); and one or more ranging satellites for providing ranging signals conveying navigation information, (paragraphs 0078 and 0088) wherein the apparatus provides the output signals indicating information as to the position or motion of the ranging receiver based on the ranging signals (paragraphs 0089, 0095, 0131).

Regarding claim 11, Healy discloses a laser based tactical engagement simulation training system characterized by a communication code structure for the system. Thus, Healy includes a method for saving power consumed by a ranging receiver (paragraph 0074), characterized by:

a step (22) of powering down selected components of the ranging receiver (12) based on whether the sensor signals indicate only at most insubstantial motion of the ranging receiver (paragraphs 0073 and 0074).

Healy does not show a mechanical coupling to the ranging receiver.

Copley discloses a system for monitoring the location of individuals and includes a wearable device and a portable device operatively coupled to the wearable device. (Abstract)

Copley meets the limitation:

a step of reading sensor signals provided by a motion sensor mechanically coupled to the ranging receiver (Figure 2, refs. 116, 216, and 223)

Healy and Copley are combinable because they share a common endeavor, namely devices that monitor location and motion. At the time of the applicant's invention it would have been obvious to modify Healy to include a mechanical coupling of the motion sensor to the range receiver as done by Copley in order to provide greater assurance of connectivity.

Regarding claim 12, Healy meets the limitation - The method of claim 11, further characterized by: a step of reapplying power to the selected components according to a predetermined rule allowing for the power to remain off for a predetermined time based optionally on recent past sensor signals, but at least as soon as the motion sensor indicates significant motion of the ranging receiver (paragraph 0074 – a predetermined number of steps).

Regarding claim 13, The Healy / Copley combination provides for the steps outlined in claim 11. However, that combination does not provide for a computer readable storage structure embodying computer program code for execution by a computer processor.

However, The examiner takes Official Notice that it is well known to utilize a computer program product such as a disk containing software providing for execution of the steps by a computer processor and that it would have been obvious to modify Healy/ Copley to utilize such a computer program product as a means of storage of these steps for later execution.

Art Unit: 2684

***Conclusion***

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Haave et al. discloses a method and system for asset tracking and panic alarm system that includes a panic alarm pendent for carrying by a person, an RF receiver module for mounting in the asset for receiving the panic alarm signal from the pendent..

Any inquiry concerning this communication from the examiner should be addressed to Alan Gantt at telephone number (571) 272-7878. The examiner can normally be reached between 9:30 AM and 6 PM within the Eastern Time Zone. The group FAX number is (703) 872-9306.

Any inquiry of a general nature or relating to this application should be directed to Supervisory Patent Examiner Nay Maung at telephone number (703) 305-4700.

Alan T. Gantt

July 21, 2005

  
**NAY MAUNG**  
**SUPERVISORY PATENT EXAMINER**